DETAILED ACTION

1. This action is responsive to after final amendment filed 3/12/2010.

2. This supplemental action is issued to correct for some minor informality with the claim 1, line 27, highlighted in bold noted in the examiner's amendment herein.

3. Applicant has requested IDS dated 7/28/09 to be included with this action. IDS 7/28/09 was included with office action of 11/12/09. However, this IDS is again included herein.

Response to Remarks/Amendment

4. Applicant's remarks/amendment, see page 15-16, filed 3/12/2010, with respect to claims 1-15, have been fully considered and as a result claims 1, 3-8, 10-14 are now indicated as allowable. However, in order to advance prosecution in the case an examiner's amendment was considered necessary, to overcome some minor claim deficiency.

5. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Douglas Holtz on 3/18/2010.

The application has been amended as follows:

IN THE CLAIMS:

Claim 1, line 25, after “which generates a” the phrase “deformation pulse, the deformation pulse” has been replaced with -- deformation pulse signal, the deformation pulse signal --.

Claim 1, lines 27, after “a phase different from” word “the” has been ***replaced with -- a --.***

Claim 3 has been replaced with the following:

-- 3 . (Currently Amended) a pulse pattern generator comprising:

a pulse generating unit which generates a pulse signal formed in a step-like wave in which at least one of a rise and fall of the pulse signal is changed in a step-like manner in a predetermined bit string between first and second predetermined amplitude values to provide a step at an amplitude between the first and second predetermined amplitude values;

a lowpass filter which smooths the pulse signal formed in the step-like wave, the pulse signal being generated by the pulse generating unit, and outputs a smoothed pulse signal; and

an amplitude-value setting unit which adjusts an amplitude value of the step-like wave that forms the pulse signal based on the amplitude value, in order to set an eye waveform at a predetermined eye closure when an output from the lowpass filter is eye-patterned, wherein the pulse signal having a desired pulse pattern with the predetermined eye closure set by the amplitude-value setting unit is configured as output from the lowpass filter;

wherein the pulse generating unit includes:

a basic pulse generating unit which generates a basic pulse signal having a predetermined amplitude value in a predetermined bit string;

a plurality of deformation pulse generating units which generate a plurality of deformation pulse signals having phases equal to or delayed from a phase of the basic pulse signal, in a bit string identical to the bit string of the basic pulse signal generated by the basic pulse generating unit; and

a signal multiplexing unit which outputs the pulse signal formed in the step-like wave by multiplexing the plurality of deformation pulse signals generated by the plurality of deformation pulse generating units.

Claim 6, line 6, the term “basic pulse generating circuit;” has been replaced with -- basic pulse generating unit; --.

Claim 6, line 12, the term “deformation pulse generating circuit;” has been replaced with -- deformation pulse generating unit; --.

Claim 6, line 13, the term “a signal multiplexing unit which outputs” has been replaced with -- wherein the signal multiplexing unit outputs --.

Claim 7, line 5, the term “basic pulse generating circuit and the deformation pulse generating circuit,” has been replaced with -- basic pulse generating unit and the plurality of deformation pulse generating units, --.

Claim 7, line 24, the term “a signal multiplexing unit which outputs” has been replaced with -- wherein the signal multiplexing unit outputs --.

Claim 8, line 2-3, the phrase “a pulse pattern generator comprising: a pulse pattern generating comprising:” has been replaced with -- a pulse pattern generator, the pulse pattern generating comprising:

Claim 8, line 31, after “a deformation pulse” word -- signal -- has been inserted.

Claim 8, line 33, after “a phase different from” word “the” has been replaced with -- a --.

Claim 10 has been replaced with the following:

--10. (Currently Amended) A communication device evaluation system utilizing a pulse pattern generator, the pulse pattern generator comprising:

a pulse generating unit which generates a pulse signal formed in a step-like wave in which at least one of a rise and fall of the pulse signal is changed in a step-like manner in a predetermined bit string between first and second predetermined amplitude values to provide a step at an amplitude between the first and second predetermined amplitude values;

a lowpass filter which smooths the pulse signal formed in the step-like wave, the pulse signal being generated by the pulse generating unit, and outputs a smoothed pulse signal; and

an amplitude-value setting unit which adjusts an amplitude value of the step-like wave that forms the pulse signal based on the amplitude value, in order to set an eye waveform at a predetermined eye closure when an output from the lowpass filter is eye-patterned, wherein the pulse signal having a desired pulse pattern with the

predetermined eye closure set by the amplitude-value setting unit is configured as output from the lowpass filter;

a characteristic evaluation device which evaluates predetermined characteristics of a device under test based on the pulse signal having the desired pulse pattern with the predetermined eye closure output from the lowpass filter of the pulse pattern generator,

wherein the pulse generating unit includes:

a basic pulse generating unit which generates a basic pulse signal having a predetermined amplitude value in a predetermined bit string;

a plurality of deformation pulse generating units which generate a plurality of deformation pulse signals having phases equal to or delayed from a phase of the basic pulse signal, in a bit string identical to the bit string of the basic pulse signal generated by the basic pulse generating unit; and

a signal multiplexing unit which outputs the pulse signal formed in the step-like wave by multiplexing the plurality of deformation pulse signals generated by the plurality of deformation pulse generating units. --

Claim 12, line 4, “generating units includes:” has been replaced with -- generating units include:

Claim 13, line 7, the term “basic pulse generating circuit;” has been replaced with -- basic pulse generating unit; --.

Claim 13, line 13, the term “deformation pulse generating circuit;” has been replaced with -- deformation pulse generating unit; --.

Claim 13, line 14, the term “a signal multiplexing unit which outputs” has been replaced with -- wherein the signal multiplexing unit outputs --.

Claim 14, line 3, “to claim 8,” has been replaced with -- to claim 10, --.

Claim 14, line 6, the term “basic pulse generating circuit and the deformation pulse generating circuit,” has been replaced with -- basic pulse generating unit and the plurality of deformation pulse generating units, --.

Claim 14, line 25, “a signal multiplexing unit which outputs” has been replaced with -- wherein the signal multiplexing unit outputs --.

Claim 14, last line, “a desired eye closure” has been replaced with -- the desired eye closure --.

Allowable Subject Matter

6. Claims 1, 3-8, 10-14 are allowed.

Reason for Allowance

7. The following is an examiner’s statement of reasons for allowance:

The prior art of record, either considered alone or in combination, neither teaches nor renders obvious a pulse pattern generator in combination with other claimed limitations comprising: a basic pulse generating unit which generates a basic pulse signal having a predetermined amplitude value in a predetermined bit string; a deformation pulse generating unit which generates a deformation pulse signal, the deformation pulse having an amplitude value different from the predetermined amplitude value of the basic pulse signal and having a phase different from a phase of the basic pulse signal, in a bit string identical to the bit string of the basic pulse signal

generated by the basic pulse generating unit; and a signal multiplexing unit which outputs the pulse signal formed in the step-like wave by multiplexing the basic pulse signal generated by the basic pulse generating unit and the deformation pulse signal generated by the deformation pulse generating unit. Such limitations as recited in the independent claims 1 and 8, is neither anticipated nor rendered obvious by the prior art of record.

The prior art of record, either considered alone or in combination, neither teaches nor renders obvious a pulse pattern generator in combination with other claimed limitations comprising: a basic pulse generating unit which generates a basic pulse signal having a predetermined amplitude value in a predetermined bit string; a plurality of deformation pulse generating units which generate a plurality of deformation pulse signals having phases equal to or delayed from a phase of the basic pulse signal, in a bit string identical to the bit string of the basic pulse signal generated by the basic pulse generating unit; and a signal multiplexing unit which outputs the pulse signal formed in the step-like wave by multiplexing the plurality of deformation pulse signals generated by the plurality of deformation pulse generating units.

Such limitations as recited in the independent claims 3 and 10, is neither anticipated nor rendered obvious by the prior art of record.

Claims 4-7 and 11-14 are allowed by virtue of their dependency to claims highlighted above.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Qutbuddin Ghulamali whose telephone number is (571)-272-3014. The examiner can normally be reached on Monday-Friday, 7:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh M. Fan can be reached on (571) 272-3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

QG.

April 21, 2010.

/CHIEH M FAN/

Supervisory Patent Examiner, Art Unit 2611